

## WHAT IS CLAIMED:

1. A recombinant *Polistinae* venom phospholipase comprising an amino acid sequence of SEQ ID NO.: 2.

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2. The recombinant *Polistinae* venom phospholipase of claim 1 encoded by an isolated nucleic acid having a nucleotide sequence of SEQ ID NO.: 1.

3. The recombinant *Polistinae* venom phospholipase of claim 1, which  
10 is a fusion protein.

4. The recombinant *Polistinae* venom phospholipase fusion protein of claim 3 expressed by a bacterial or a yeast cell.

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5. The recombinant *Polistinae* venom phospholipase fusion protein of claim 3 further comprising a cleavage site for a specific protease.

6. The recombinant *Polistinae* venom phospholipase fusion protein of claim 3 further comprising a polyhistidine sequence.

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7. A pharmaceutical composition for modulating an immune response towards an immunogen in a mammal comprising the recombinant *Polistinae* venom phospholipase of claim 3 and a pharmaceutically acceptable carrier.

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8. A method for modulating a vespid venom allergen-specific allergic condition in a mammal comprising administering to said mammal the recombinant *Polistinae* venom phospholipase of claim 3.

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9. The method of claim 8, wherein the vespid venom allergen is phospholipase.

10. The method of claim 8, wherein the allergic condition is an allergy to hymenoptera venom.

11. The method of claim 8, wherein the recombinant *Polistinae* venom phospholipase is administered orally, pulmonarily, nasally or topically.

12. The method of claim 8, wherein the immune response is an immunologically affected disease or disorder or symptom related thereto.

13. The method of claim 12, wherein the immunologically affected disease or disorder is a pathogenic disease or disorder; a viral infection; an autoimmune condition; an allergic condition; or a combination of two or more of the foregoing.